# RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation DT1241 8/2010

#### INSTRUCTIONS:

Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

□ F	DOT research program Policy research Other		_	nway Research Progra PF#	m	Report period year: 2013  Quarter 1 (Jan 1 – Mar 31) Quarter 2 (Apr 1 – Jun 30) Quarter 3 (Jul 1 – Sep 30) Quarter 4 (Oct 1 – Dec 31)				
Proj	ect title: Analysis of Tren	ds/Correlations	of Histo	orical WisDOT Soil Lab	Гest R	esults Through D	evelopment of a Database			
Proj	ect investigator: Mark S.	Meyers	Phone	e: 608-342-1542		E-mail: meyersm@uwplatt.edu				
Administrative contact: Angela Pakes Ahlman				e: 608-890-4966		E-mail: apakes@sustainability.wisc.edu				
WisDOT contact: Jeff Horsfall				e: 608-243-5993		E-mail: jeffrey.horsfall@dot.wi.gov				
WisDOT project ID: 0092-11-04				project ID:		Project start date: 10/21/2010				
Original end date: 10/21/2012				nt end date: 10/21/201	13	Number of extensions: 1				
-	Project schedule status:  ☐ On schedule ☐ On revised schedule ☐ Ahead of schedule ☐ Behind schedule  Project budget status:									
[	Total Expenditu			Total		% Funds	% Work			
	Project Budget Current Qua		rter	Expenditures		Expended	Completed			
	\$63,951.00 \$18,009.2			\$45,468.12		71% 60%				

## **Project description:**

The objectives of this project are to create an electronic database of WisDOT soil laboratory testing results that will be linked to a Geographic Information System (GIS) to allow for searching WisDOT project related records by spatial location, which will facilitate the planning of geotechnical explorations and provide geotechnical data for planning and design of transportation facilities and to to analyze the data in the database for trends and correlations relating to location, soil type, soil classification, geologic source, index properties, structural design values, etc., and to compare the trends to typical published values for respective soil types.

**Progress this quarter** (includes meetings, work plan status, contract status, significant progress, etc.): Progress this quarter included continuing to scan data at the Truax facility. Students have been provisioning the data base. Anticipate scanning of data to be completed by August 1 and provisioning completed by Sept 1.

#### Anticipated work next quarter:

Our plan is to continue scanning Geotechnical data at the DOT Truax Office, continuing to enter data into the database, perform Quality Assurance/Quality Control on the data provisioned into the database, and scanning of Geotechnical Data at the LaCrosse, Superior, Eau Claire, and Wisconsin Rapids Offices Regional Offices. Data collection and provisioning will continue until they are completed.

## Circumstances affecting project or budget:

We were using a Microsoft Access database. We encounterd problems entering data into the database because of a space limit. Research indicated that the maximum size of an Access data base is 2.5 GB. We are switching to an SQL Server database to overcome this problem. A benefit of switching to SQL Server is that the Gint database is also an SQL Sever. We have had to convert the database to a county-based database, which is taking some time, after which the data for each county must be verified, after which data entry can again begin.

Based on this problem and the sheer amount of hard data that is to be scanned (about 12 GB), we have requested an additional no cost extension for this project.

FV 2012-2013

The schedule shown below does not represent the additional extension that has been requested.

### Insert Gantt chart and other project documentation – attach additional pages if necessary

# Exhibit 1 UW-Platteville Schedule Update

	FY 2012-2013																
Task		0	N	D	J	F	M	Α	M	J	J	Α	S	0	N	D	J
Task 1: Literature Search	Proposed Actual	Cor	mple	ted													
Task 2: Data Collection and																	
Review	Proposed	Cor	nple	ted													
	Actual																
Task 3: Database																	
Design/Development	Proposed	Cor	nple	ted													
	Actual																
Task 4: GIS Design and Linkage	Proposed	Cor	nple	ted													
	Actual																
Task 5: Provisioning the Data																	
Base	Proposed																
	Actual	Ш	廿	Ш	世	$\Box$		$\mathbf{H}$									
Task 6: Data Analysis	Proposed										١.						
	Actual										$\blacksquare$			П	П		
Task 7: Report	Proposed																
	Actual												$\blacksquare$	$\blacksquare$	+		
TOC Review/Final																	
Submittal/Presentation	Proposed																
	Actual														$oldsymbol{\Pi}$	H	幵

## FOR WISDOT USE ONLY

Staff receiving QPR: K. Dinkins	Date received: 09/30/2013				
Staff approving QPR:	Date approved:				